# State of Alaska Epidemiology



# Bulletin

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# PVC7 and ComvaxÔ Available from Alaska Immunization Program

Beginning January 1, 2001, the Alaska Section of Epidemiology will supply *Prevnar***O** (7-valent pneumococcal conjugate vaccine or "PCV7" and *Comvax***O** (combination hepatitis B and *Haemophilus influenzae* type b or "Hib" vaccine). Indications for use of each vaccine are described below. Additional information may be found in the companion *Epidemiology Bulletin* No. 20, December 22, 2000, 2001 Alaska Immunization Recommendations.

## PCV7 (PrevnarÔ)

### **VACCINE COMPOSITION & ADMINISTRATION**

PCV7 includes purified capsular polysaccharides of seven serotypes of *S. pneumoniae* (14, 6B, 19F, 18C, 23F, 4 and 9V). The vaccine contains no preservatives or thimerosal. PCV7 is licensed for use among children aged  $\geq 6$  weeks. It is administered intramuscularly as a 0.5 ml dose.

#### RECOMMENDATIONS FOR USE

- All children 6 weeks 23 months of age;
- "High Risk" children 24-59 months of age who are at high risk for pneumococcal infection caused by an underlying medical condition, as shown below:
  - Children with Sickle Cell Disease and other sickle cell hemoglobinopathies, including hemoglobin SS, hemoglobin S-C, or hemoglobin S-β-thalassemia, or children who are functionally or anatomically asplenic;
  - Children with **HIV infection**;
  - Children who have chronic disease, including chronic cardiac and pulmonary disease (excluding asthma), diabetes mellitus, or CSF leak;
  - Children with **immunocompromising conditions**, including (a) malignancies (e.g., leukemia, lymphoma, Hodgkin's disease); (b) chronic renal failure or nephrotic syndrome; (c) those children receiving immunosuppressive chemotherapy, including long-term systemic corticosteroids; and (d) those children who have received a solid organ transplant.

# CHILDREN FOR WHOM PCV7 SHOULD BE CONSIDERED All children 24-59 months of age, with priority given to:

- Children aged 24-35 months;
- Children of Alaska Native or American Indian descent;
- Children of African-American descent;
- Children who attend group day care centers.

## PCV7 Vaccination by Age at Time of First Vaccination

Age at 1 st Dose (mos)	Primary Series	Add'l Dose
2-6	3 doses, 2 months apart	1 dose at 12-15 months*
7-11	2 doses, 2 months apart	1 dose at 12-15 months*
12-23	2 doses, 2 months apart	None
24-59		
Healthy children	1 dose	None
High Riskchildren	2 doses, 2 months apart	PPV23 *

For children <1 year of age, minimum interval is 4 weeks (children ≥ 1 year of age require 8 weeks)

# PCV7 for Children with a Lapse in Vaccine Administration

Current Age (months)	Previous PCV7 History	Recommended Regimen
7 - 11	1 or 2 doses	1 PCV7 now, 2 <sup>nd</sup> dose ≥2 months later @ 12-15 months
12 - 23	1 dose <12 months	2 PCV7 ≥2 months apart
	2 doses < 12 months	1 PCV7 ≥2 months after most recent dose
24 - 59	Any incomplete schedule	1 PCV7 *

<sup>+ &</sup>quot;High risk" children should receive 2 doses ≥2 months apart

## Comvax<sup>1</sup>

### VACCINE COMPOSITION

Each dose of  $Comvax^{TM}$  contains 7.5 µg of  $PedvaxHIB^{@}$  and 5 µg RECOMBIVAX  $HB^{@}$ .

#### RECOMMENDATIONS FOR USE

 $Comvax^{TM}$  may be used whenever either antigen (hepatitis B or Hib) is indicated and the other antigen is not contraindicated. According the Hepatitis Branch, CDC, the vaccine may be used regardless of the mother's HbsAg status. Although  $Comvax^{TM}$  is licensed for use through 71 months of age, Hib is not routinely recommended after 59 months of age.

### RECOMMENDED SCHEDULE

Three doses of  $Comvax^{\text{TM}}$  should be administered at ages 2, 4, and 12-15 months.  $Comvax^{\text{TM}}$  must NOT be used with infants younger than 6 weeks of age due to potential suppression of the immune response to the Hib component. Therefore,  $Comvax^{\text{TM}}$  must not be used for doses at birth or 1 month of age.

Because single antigen hepatitis B vaccine should continue to be given at birth, a child on the recommended schedule with *Comvax* will receive an extra dose of hepatitis B vaccine. The ACIP, AAP, and AAFP have stated "this has not been found to be harmful" (*MMWR*, RR05/ Vol 48/ May 14, 1999), and this schedule is followed in other parts of the world.

# TRANSITION FROM CURRENT ALASKA HIB RECOMMENDATION TO $COMVAX^{^{TM}}$

Since December 1997 the Alaska Immunization Program has recommended a Hib regimen of  $PedvaxHIB^{\circledast}$  for dose #1 and  $HibTITER^{\circledast}$  for doses 2-4. With the implementation of  $Comvax^{\bowtie}$ ,  $HibTITER^{\circledast}$  will no longer be available from the Immunization Program. (This change is fully supported by the Alaska Native Tribal Health Consortium.) Individual antigen hepatitis B and  $PedvaxHIB^{\circledast}$  will remain available for use in patients who need only one antigen.

Providers should continue to use available *HibTITER*<sup>®</sup> until remaining stocks are exhausted. Because *HibTITER*<sup>®</sup> requires an additional dose at 6 months of age (for a total of 4 doses), vigilance must be maintained to ensure children receive adequate protection against Hib disease. If a child has received only *HibTITER*<sup>®</sup> or any mixture of *HibTITER*<sup>®</sup> and *PedvaxHIB*<sup>®</sup>, he/she will need four total doses of vaccine. If the record does not indicate which type of Hib vaccine was given for any dose, use of *HibTITER*<sup>®</sup> must be presumed and the total number of doses adjusted accordingly.

## **Hib Vaccine Transition Schedule**

Vaccine Usage History	Total Number Hib Doses Needed
HibTITER® Only	4
Any mixture of <i>PedvaxHIB</i> <sup>®</sup> and <i>HibTITER</i> <sup>®</sup> (or unknown hx)	4
PedvaxHIB <sup>®</sup> Only	3

# **Questions?**

Contact the Alaska Immunization Program at 269-8000.

<sup>\*</sup> Booster dose should be≥ 8 weeks after primary series complete

One dose of PPV23 recommended 2 months after last PCV7